## GEOL 2020 HISTORICAL GEOLOGY SPRING 2017

#### **Instructor Info**

Dr Alan Coulson 339 Brackett Hall acoulso@clemson.edu

(864) 656-1897

I reply to phone calls and emails from 8am-2pm M-F. Phone messages & emails left after 2 pm may not be received until the next day. Email access on the weekend is sporadic, so emails sent after 2pm Friday likely will not be received until Monday.

### **Office Hours**

1:00-2:30 M W or by appointment

## **Meeting Times**

Lecture: MWF 11:15 – 12:05 Lab: R 2:00-5:00 in 423 Brackett

## **Learning Objectives**

Students who successfully complete the course should be able to do the following by the end of the semester:

- 1- Identify & classify specimens representing the major groups of fossil organisms
- 2- Outline Earth's geologic timescale
- 3- Explain the major tectonic and evolutionary events from throughout Earth's history
- 4- Research an Earth history topic and present your findings before your peers
- 5- Write a concise, professional, essay on a scientific topic

#### **Materials**

'Historical Geology' 6/7<sup>th</sup> ed. by Wicander & Monroe. Brooks/Cole Cengage Learning.

### **Policies**

Any student with a disability requiring that special circumstances be met for their successful completion of the course should see me as soon as possible.

Academic dishonesty, harassing others, and disruptive behavior will not be tolerated and will result in disciplinary action, including being dropped from the course. All cases of academic dishonesty & plagiarism will be reported to Academic Affairs with a recommendation that you receive an F for the entire course.

If the professor is late, students must wait 15 minutes before class is officially cancelled.

Cell phones are to be turned off during class & lab. Anyone caught texting. surfing, checking msgs, etc will be told to leave class for the day. A second violation will result in you being dropped from the course.

### Grades

This class uses the traditional 10-pt scale.

A = 100-90 B = 89-80 C = 79-70 D = 69-60 F = 59-0

Decimals of 0.5 and higher are rounded up; decimals of 0.49E are rounded down.

Ex- 79.5 is a B. 79.49999 is a C.

Your grade is based on the following:

4 mid-term lecture exams, the one lowest mid-term is dropped: 14% each

Comprehensive final exam 13%

Term paper 10%

Class presentation 9%

6 Lab quizzes 1% each

Mid-term lab exam 10%

Final lab-exam 10%

Assignments not turned in on time will receive a grade of zero. No make-up exams will be given without a written, university-approved absence. No extra credit will be given, and no grades will be curved. These policies are FINAL and will not be changed.

Any grading mistakes must be reported to me within 1 week of the assignment being returned to the class and the original paper must be presented. After 1 week you cannot get points added back to your grade even if you find a grading error.

### **Attendance**

Lecture attendance is not graded but is necessary to do well. Lab exercises & quizzes cannot be made up. One lab may be missed without extra penalty; for each additional lab missed your class grade is dropped 10% (= 1 full letter grade).

#### Schedule

This is approximate, I'll try to announce any changes well in advance.

1.1	, ,
M 1/16	No class (MLK Day)
M 2/6	Exam 1
R 2/16	Lab mid-term exam
F 3/10	Paper/presentation topic due by beginning of class
F 3/3	Exam 2
F 3/17	Last day to drop
3/20-3/24	Spring Break
F 3/31	Exam 3
R 4/6	No lab- Dept Symposium
M 4/10	Term paper due by 9:00 am
M 4/17	Presentation due by beginning of class
R 4/20	Lab final exam
M 4/24	Exam 4
F 4/28	Last day of classes
T 5/2	Final exam 8:00-10:30

## **Topics**

This is the list of topics, in order, that we'll cover this semester. The corresponding chapters in your textbook are listed.

### Lectures:

Introduction to Earth History ch 1 Rocks & Minerals Review **Sedimentary Rocks** ch 6 Stratigraphy ch 5 Geologic Time ch 4 Plate Tectonics Review ch 3 Structural Geology n/a Paleoclimatology ch x **Evolutionary Basics** ch 7 The Hadean & Archean Eons ch 8 The Proterozoic Eon The Paleozoic Era ch 10-13 The Mesozoic Era ch 14-15 The Cenozoic Era ch 16-19

### Labs:

- 1- Geologic Time
- 2- Mineral & Rock Identification
- 3- Sedimentary Structures & Correlation
- 4- Geologic Dating
- 5- Paleoclimate Data
- 6- Mid-term exam (labs 2-5)
- 7- Biologic Classification

## Week off- Exam the next day

- 8- Fossil Preservation & Invertebrate Identification- Early Paleozoic
- 9- Late Paleozoic-Early Mesozoic Fossil Identification

## Spring Break

10- Geologic Maps

# No Lab- Hydro Symposium

- 11- Museum Assignment
- 12- Lab Final Exam (labs 7-11)
- 13- Make-up day if we need it; if not, then no lab